Natural Gas Supply Contracts—Looking Back Over The Years

Indiana Utility Regulatory Commission
Indianapolis, Indiana
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American Gas Association
Washington, D.C.

American Gas Association

American Gas Association

- National, nonprofit trade association serving the interests of 195 investor-owned and municipal natural gas utilities
- Actively advocates for natural gas utilities in Congress, before the Executive Branch of the Federal Government, and before the Federal Energy Regulatory Commission
- Does not represent the interests of natural gas producers or interstate natural gas pipelines

American Gas Association Issues

- Supply, demand, and prices
- Infrastructure to meet demand
- Assistance to low-income consumers
- Energy efficiency
- New technologies

NATURAL GAS REGULATION MILESTONES

- NATURAL GAS ACT OF 1938
- PHILLIPS DECISION
- NATURAL GAS POLICY ACT OF 1978
- FERC ORDER NOS. 380/436/500/528
- NATURAL GAS WELLHEAD DECONTROL ACT
- FERC ORDER NOS. 636/637

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DEVELOPMENTS PRIOR TO 1938

- Discovery of Natural Gas
- Manufactured Gas
- Early Pipelines
- Commerce Clause Cases

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NATURAL GAS ACT OF 1938

- Section 1: jurisdiction over interstate transportation and sale of gas for resale
- Section 3: import and export federally regulated
- Sections 4 and 5: rates and charges federally regulated
- Section 7: construction and operation federally regulate

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PHILLIPS DECISION

- Decided by the U.S. Supreme Court in 1954
- Concluded that independent producers selling gas into the interstate market were “natural gas companies” subject to federal jurisdiction under the Natural Gas Act
- Effectively placed production destined for the interstate market under Federal Power Commission jurisdiction

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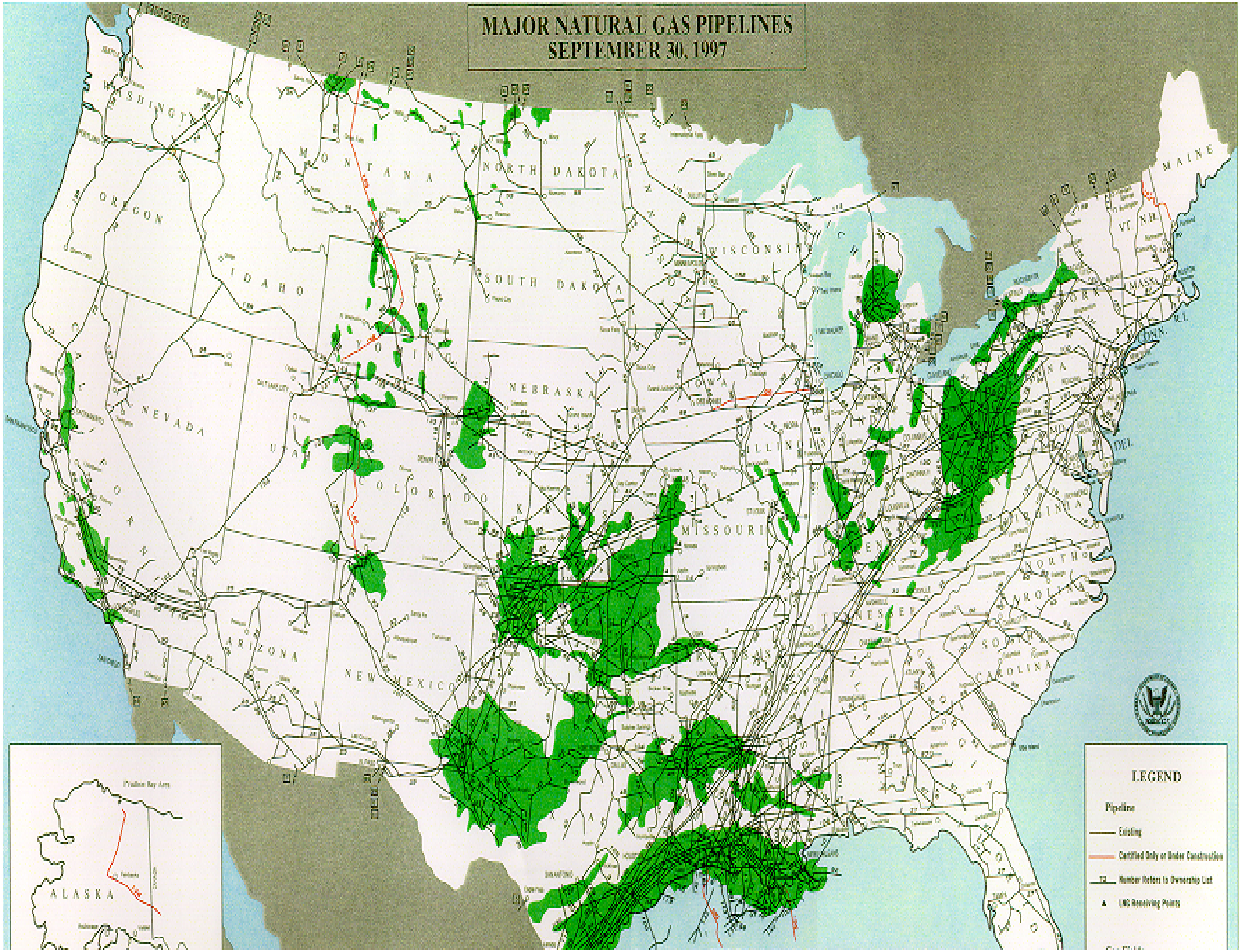
MAJOR NATURAL GAS PIPELINES
SEPTEMBER 30, 1997
LEGEND
Pipeline
Existing
Certified Only or Under Construction
Number Refers to Ownership List
LNG Receiving Points
ALASKA
Prudhoe Bay Area

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The Contractual Paradigm

- Interstate pipelines the exclusive merchants and transporters of natural gas
- Sales and transportation rates established by FPC/FERC
- FPC required to certificate all interstate sales of natural gas
- Dominant pattern was dedication of gas to interstate market, twenty-year or life-of-reserves contract with pipeline
- Bundled sales agreements with customers were typically twenty years in length

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Federal Regulation Led To Shortages

- Cost-of-service price regulation led to gas being priced below market value
- Cost-of-service price regulation led to inadequate incentives for exploration and production
- The result was shortages in the 1960’s and 1970’s

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Natural Gas Policy Act of 1978

- **Section 102:** New Natural Gas and Certain Natural Gas Produced from the Outer Continental Shelf
- **Section 103:** New, Onshore Production Wells
- **Section 104:** Natural Gas Dedicated to Interstate Commerce ("Old Gas")
- **Section 105:** Sales Under Existing Intrastate Contracts
- **Section 106:** Sales Under Rollover Contracts ("Old Gas")
- **Section 107:** High-Cost Natural Gas
- **Section 108:** Stripper Well Natural Gas
- **Section 109:** Other Categories of Natural Gas

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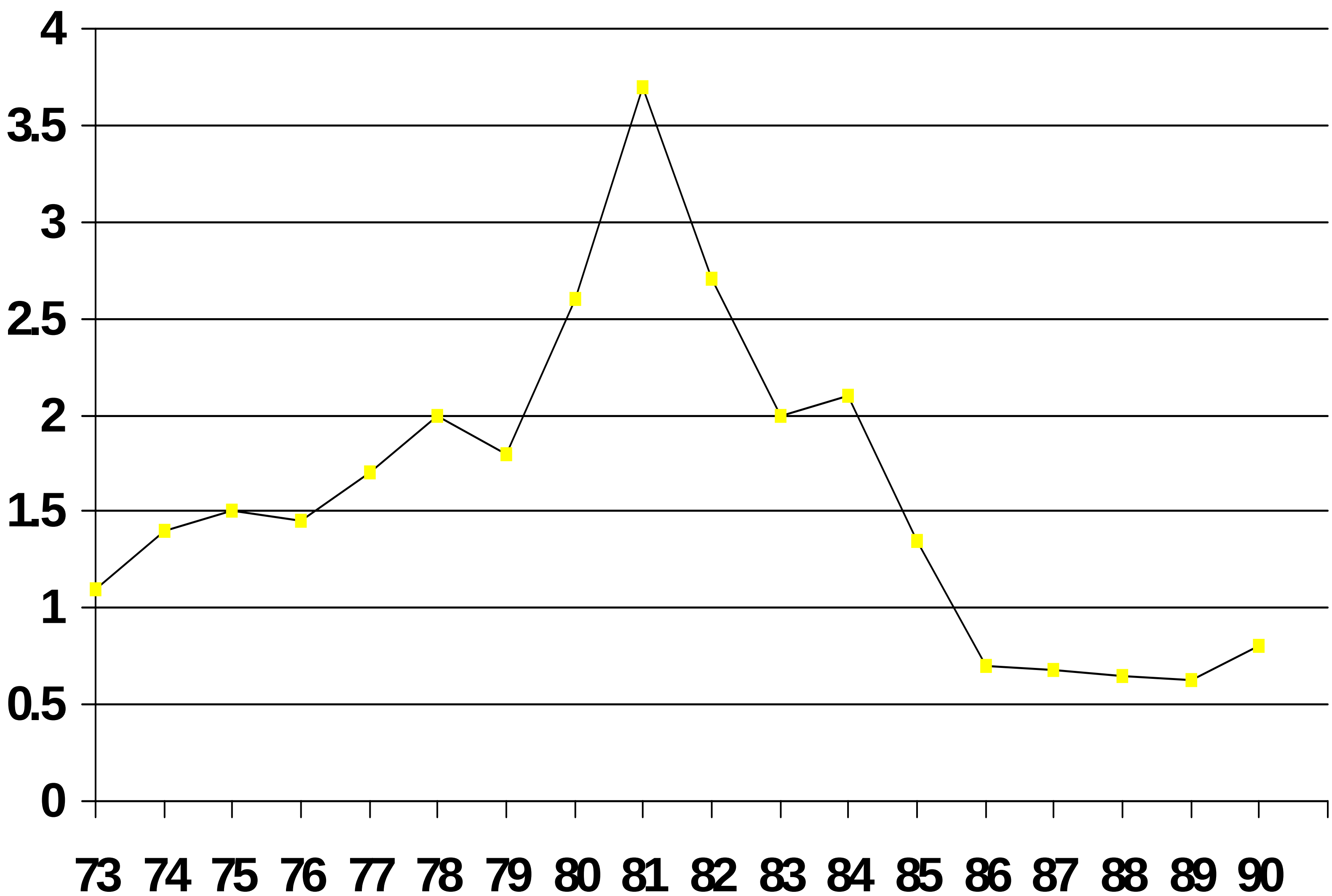
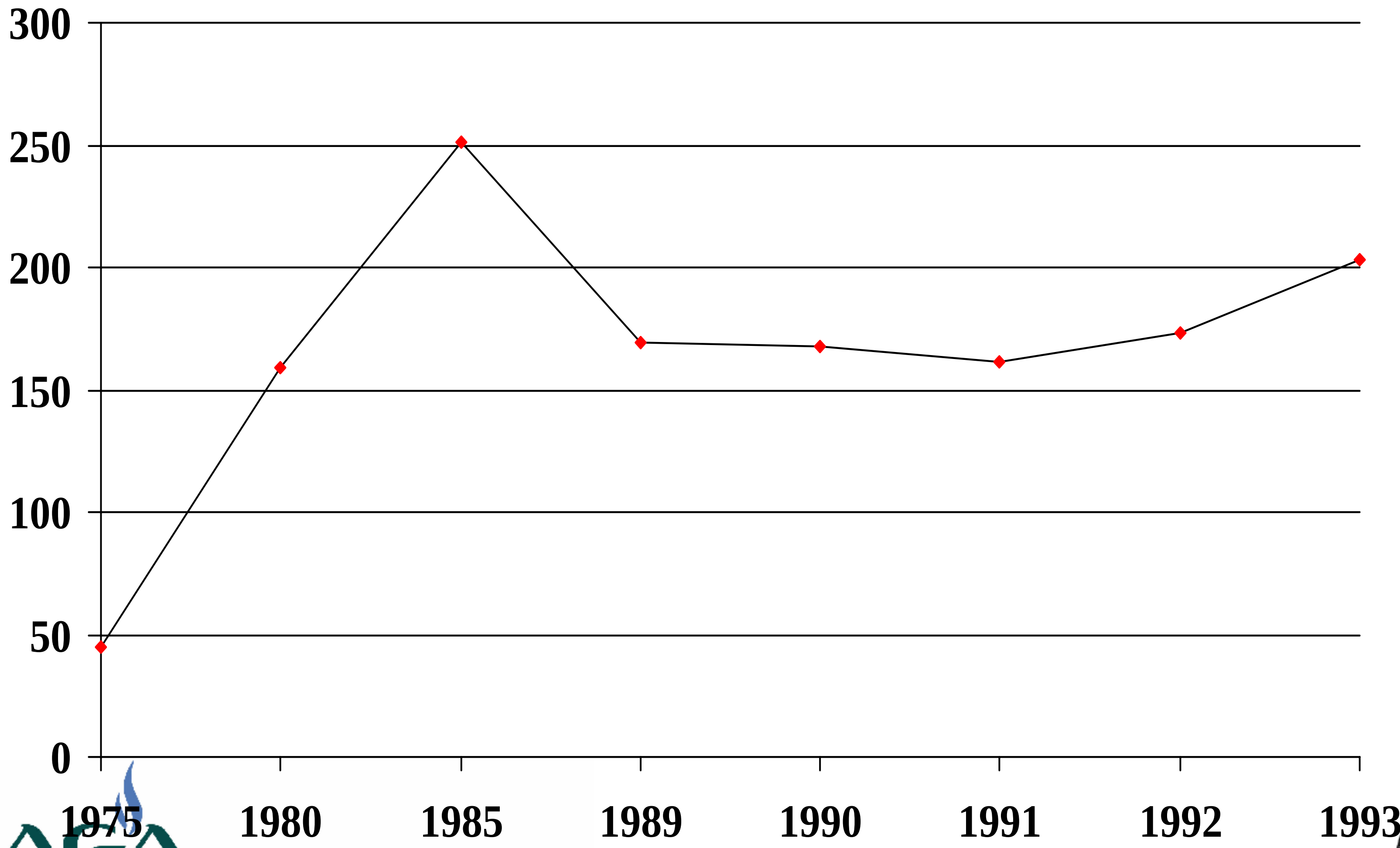
ANNUAL AVERAGE ONSHORE RIG COUNT



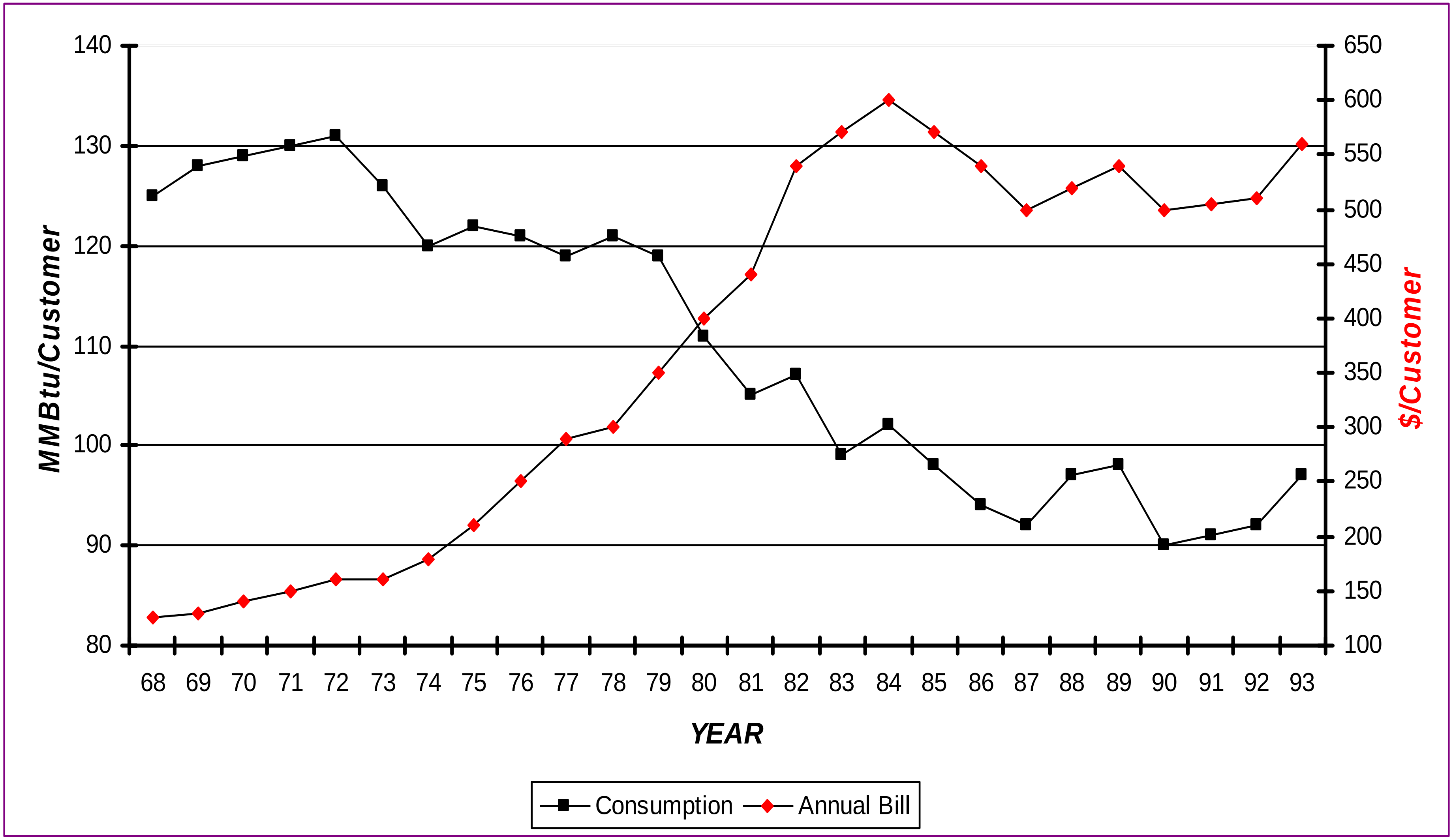
AVERAGE WELLHEAD PRICES OF NATURAL GAS

1975 - 1992



Source: Gas Facts 1994, American Gas Association

AVERAGE RESIDENTIAL CONSUMPTION
1968 - 1993



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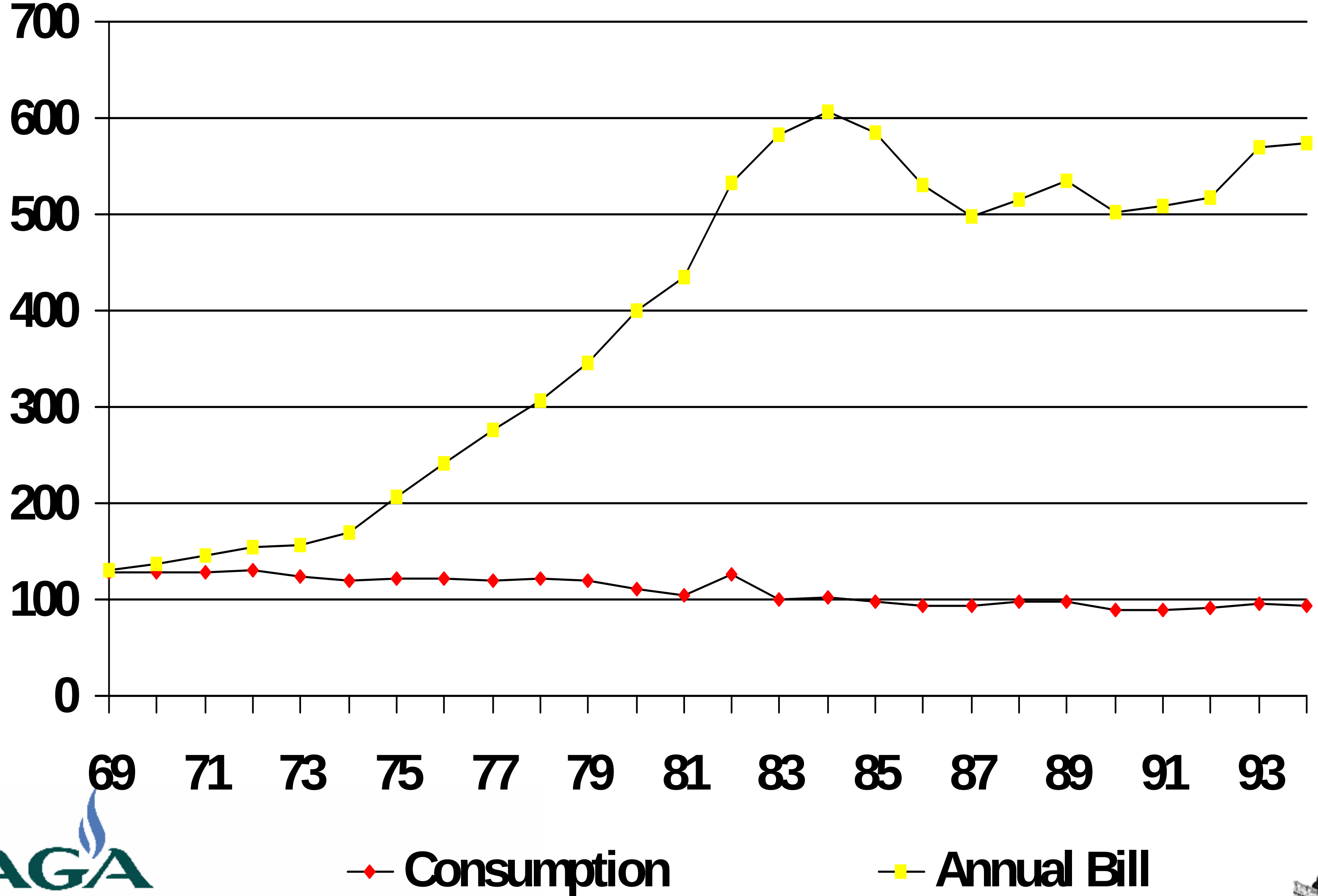
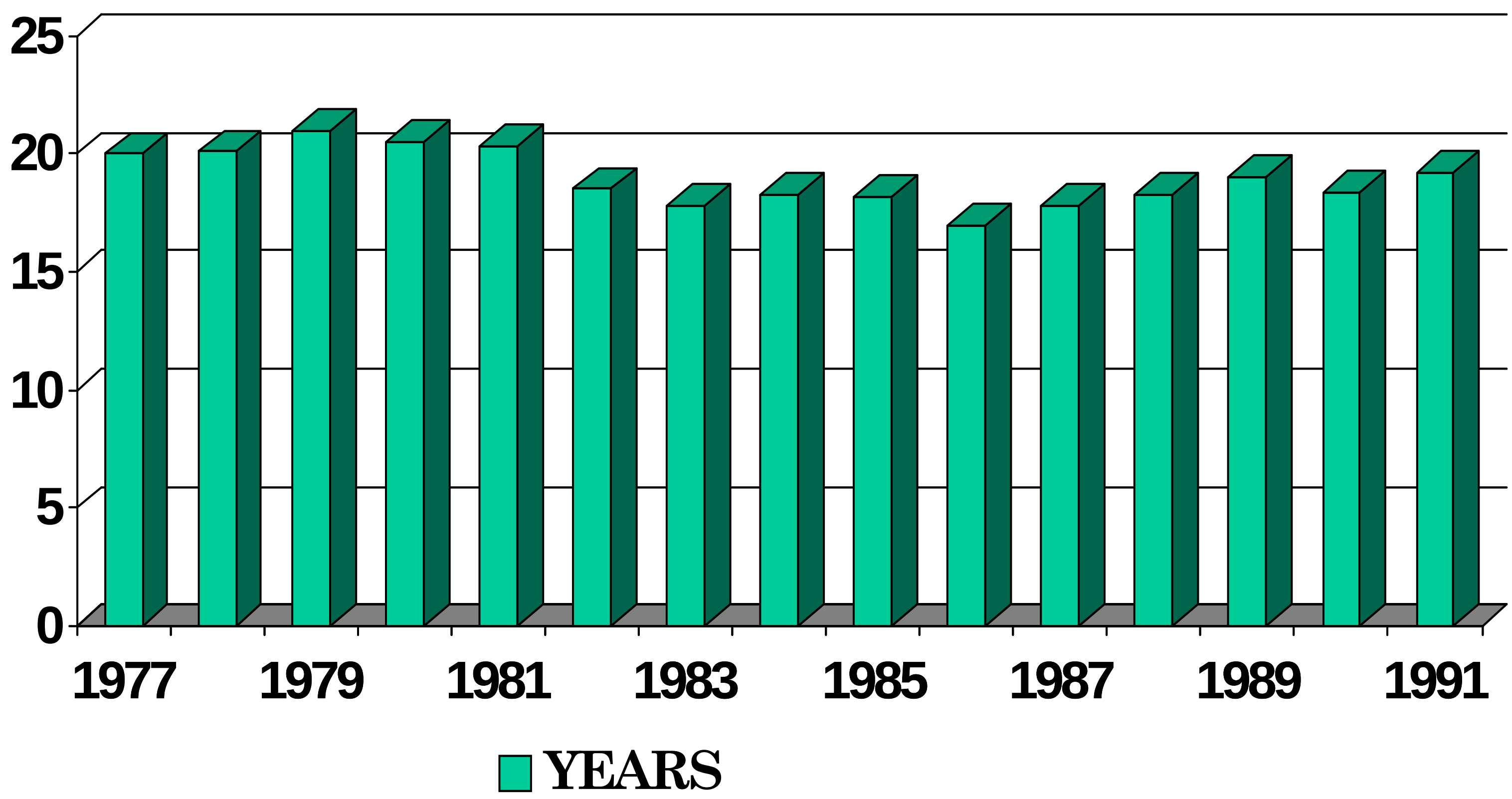
Source: Gas Facts 1994, American Gas Association

Average Residential Consumption
1969 - 1994



Source: Gas Facts 1994, American Gas Association

United States Gas Consumption
1977 – 1991 (Millions of Cubic Feet)



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Source: Gas Facts 1994, American Gas Association

ORDER NO. 380

- Prohibited the recovery of gas costs and other variable costs through pipeline minimum commodity bills
- Rationale:
  - ✓Pipeline should not recover costs it had not incurred
  - ✓Minimum commodity bills could thwart competition
- Resulted in some competition between pipelines for sales

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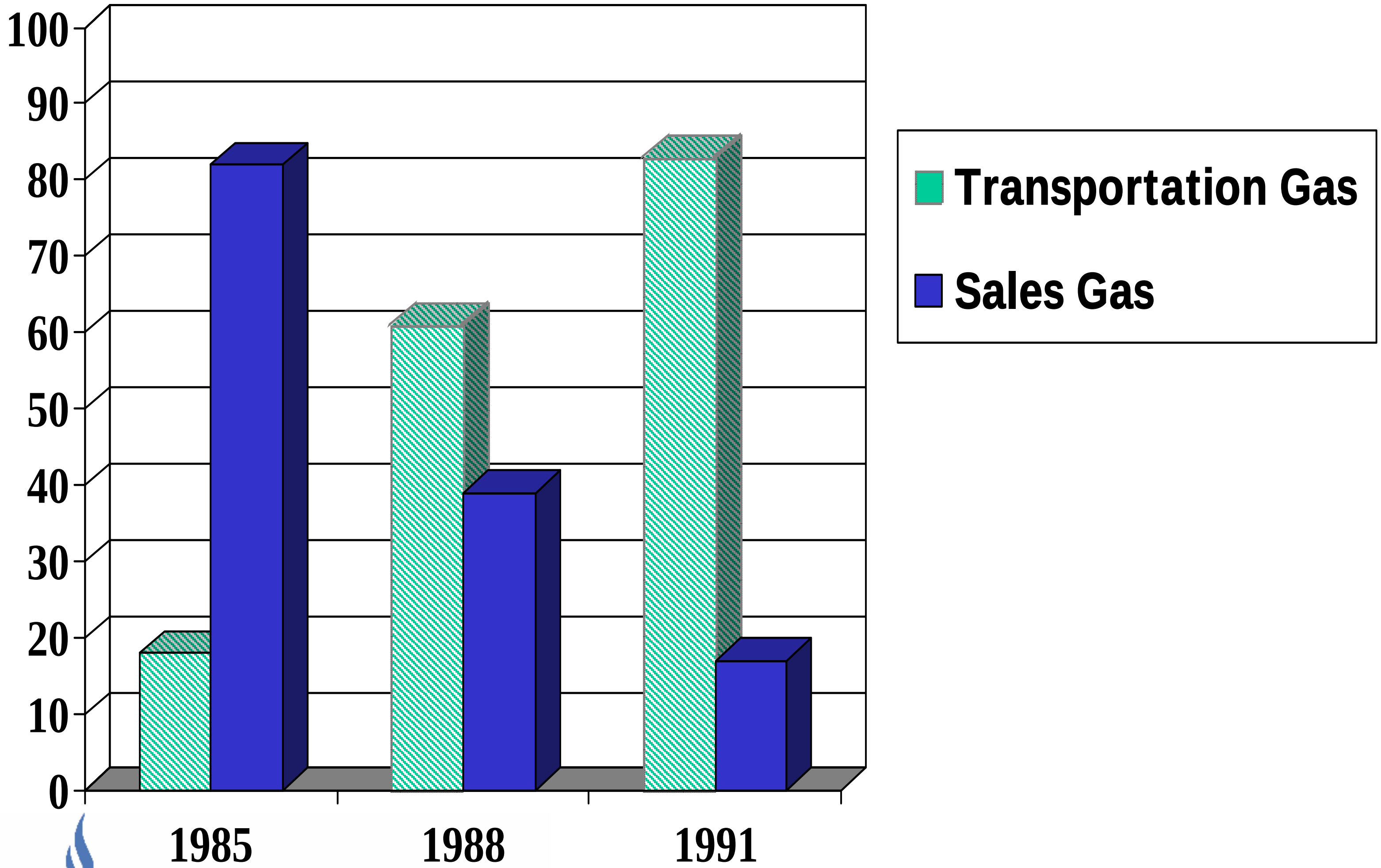
ORDER NO. 436

- Permitted pipelines to obtain “blanket” certificates
- Blanket certificates permitted transportation without advance FERC approval
- Required pipelines to transport for all seeking service on a first-come, first-serve basis--i.e., “open-access” transportation
- Permitted pipelines to discount transportation rates
- Did not address take-or-pay problem

U.S. PIPELINE THROUGHPUT IN PERCENTAGE



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Source: Interstate Natural Gas Association of America

ADD-ON PRICING

WELLHEAD MAXIMUM LAWFUL PRICE

+

PIPELINE MARGIN

+

DISTRIBUTOR MARGIN

=

BURNERTIP PRICE

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NETBACK PRICING

Competitive Fuel Price at the Burnertip

Less: Distributor Transportation Charge

Less: Pipeline Transportation Charge

Equals: Wellhead Price

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ORDER NO. 500

- Required producers utilizing open-access transportation on pipelines to give take-or-pay credit for volumes transported
- Take-or-pay buyout and buydown passthrough mechanism:
  - ✓ Commodity surcharge <u>OR</u>
  - ✓ Direct Bill:
    - Pipeline Absorbs half of costs
    - Pipeline "direct bills" half of costs
    - Direct bill based on "purchase-deficiency" method
    - Unsuccessful customer prudence challenge results in paying 100% of costs rather than 50% of costs <u>OR</u>
  - ✓ Combination of commodity surcharge and direct bill

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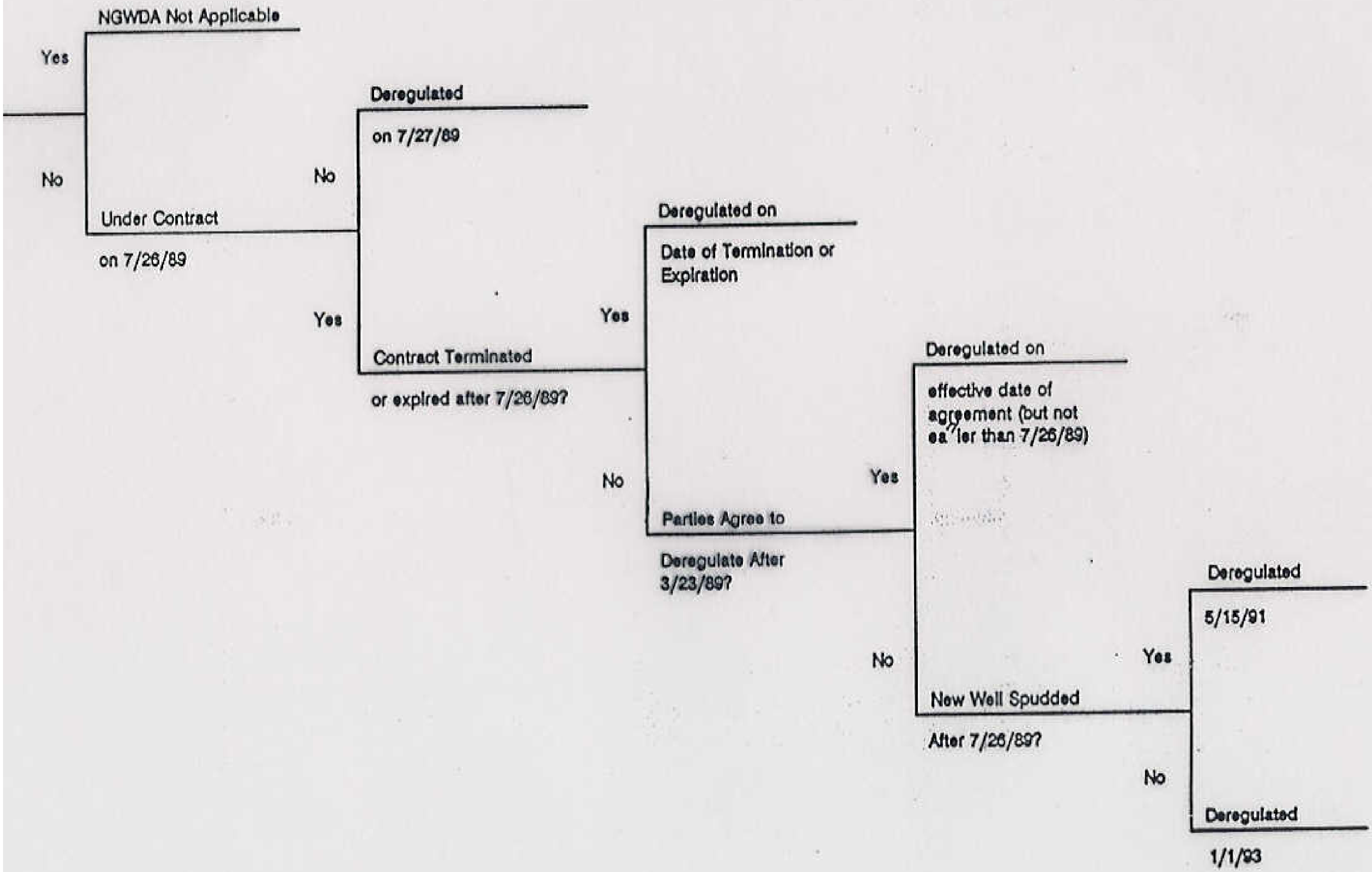
N G W D A Deregulation Schedule



ORDER NO. 636

- Continuation of Order No. 436 process
- Required “unbundling” of sales and transportation functions
- Moved point of sale for pipeline sales gas upstream from city gate toward wellhead
- Permitted pipelines to engage in free price competition with unregulated gas merchants as to sales of gas
- Permitted pipelines to pass “transition costs” of complying with Order No. 636 on to their customers

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ORDER NO. 636 (continued)

- Required uniform pipeline rate design--straight fixed-variable--in which all pipeline fixed costs are collected through the monthly demand or reservation charges
- Permitted holders of firm pipeline transportation capacity to resell that capacity through capacity release procedure

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ORDER NO. 636
TRANSITION COSTS

- ✦Unrecovered balances in purchased-gas accounts: remaining uncollected gas costs upon termination of PGA
- ✦ Collected by direct bill from former bundled sales customers
- ✦ Gas-supply realignment costs: reformation or termination of gas-purchase contracts attributable to Order No. 636
- ✦ 100% of these costs can be recovered by a negotiated exit fee or surcharge on open-access transportation

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ORDER NO. 636
TRANSITION COSTS
(continued)

- Stranded costs: costs associated with assets used in traditional sales service that are no longer necessary, e.g., upstream pipeline capacity
- Recovered through future Section 4 rate case
- New facility costs: e.g., electronic bulletin board improvements, improved metering telemetry, etc. to implement Order No. 636
- Recovered through future Section 4 rate case

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Order No. 637

- Capacity Release Price Cap Waived
- Differentiated Peak and Off-peak Rates
- Term-Differentiated Rates
- Scheduling Equality
- Segmentation of Primary and Secondary Services
- Parking and Lending Services
- Minimize OFO's
- Minimize Shipper Penalties and Credit Penalties to Customers
- Same Data for Firm and IT as for Capacity-Release Transactions
- Restricted ROFR Created by Order No. 636

What Do Natural Gas Supply Contracts Look Like Today?

- No longer first sales to pipelines
- No longer bundled sales to local distribution companies

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What Do Natural Gas Supply Contracts Look Like Today?

- A long-term contract is one year rather than twenty years
- Sales can be made at the wellhead, a market hub, or the citygate
- More than thirty market hubs exist

What Do Natural Gas Supply Contracts Look Like Today?

- Natural gas can be purchased for an hour or ten years and any term in between
- Natural gas can be purchased at a market (index) price or a fixed price
- Financial products can be combined with the gas supply contract
- Gas can be bought on a futures basis on a bilateral or exchange transaction basis

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What Do Natural Gas Supply Contracts Look Like Today?

- Contracts can be sculpted as to:
  - ✓Pricing mechanism
  - ✓Risk attributes
  - ✓Term
  - ✓Delivery point
  - ✓Seasonality
- Gas supply contracts today are the antithesis of the one-size-fits-all paradigm prior to the 1990's

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Why the Total Transformation of Natural Gas Supply Contracts?

- Congressional and FERC action to bring competitive forces to bear in natural gas supply and transmission markets
- Government actions unleashed competitive forces
- The genie cannot be put back in the bottle

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Why The Shortening of Contract Terms?

- Order No. 636 to a significant extent pushed the merchant function downstream to LDC's, with an increase in regulatory risk
- This spurred the growth of sales intermediaries—marketers
- Marketers offered an ever-widening array of products

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Why The Shortening of Contract Terms?

- LDC's now purchase about half the nation's retail gas
- End users purchase most of the rest
- End users have not been accustomed to twenty-year contracts

Why The Shortening of Contract Terms?

- The regulatory risk-reward asymmetry
- The retail choice conundrum
- The shortening of planning horizons of local distribution companies
- The perceived lack of advantage in long-term contracts
- The market forces unleashed by federal and state regulators have led to a market decision on contract term

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Questions?

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Thank You!

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